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Claims

1. Control system with operating unit for an electrophotographic printing or copying system

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with at least one operating unit (158 [sic]) for input and/or output of operating information of the printing or copying system,

with a first control unit (130) and at least one second control unit (140),

10 whereby the control units (130, 140) control at least one part of the electrophotographic printing or copying system,

with a data line via which the control units (130, 140) are connected with one another and via which control data can be transferred between the

15 control units (130, 140),

whereby at least one part of the transferable control data can be input and/or output by the operating unit (156) in addition to the operating information.

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2. Control system according to claim 1, characterized in that the data transfer occurs at least between the control units (130, 140) with the aid of a data transfer protocol, in particular a Simple Network Management Protocol.

25 3. Control system according to any of the preceding claims, characterized in that the access to the operating information and/or the control data occurs with the aid of a distributed object model in which the objects are contained in units (156, 130, 140) of the printing or copying system.

30 4. Control system according to claim 3, characterized in that the operating unit (156) accesses at least one object of at least one control unit (130),

whereby the object contains data with operating information and/or control data.

5.   Control system according to any of the preceding claims, characterized in that the operating information and/or the control data are processed with the aid of data, data structures, files and/or events that are object-related.

6.   Control system according to any of the preceding claims, characterized in that the operating unit (156) has at least one object for input and/or output of operating information and control data, whereby the data transfer between operating unit (156) and at least one control unit (130) occurs with the help of the objects.

7.   Control system according to claim 6, characterized in that the data transfer between objects defined in the programming language Java occur with the aid of a standardized model for abstract description of distributed objects.

8.   Control system according to claim 7, characterized in that the standardized model for abstract description of distributed objects occurs according to a Common Object Request Broker Architecture, and the access to the control data and operating information occurs with the aid of a Remote Method Invocation communication.

9.   Control system according to any of the preceding claims, characterized in that the control data contain control variables, whereby at least the values of these control variables can be input and/or output with the aid of the operating unit (156).

10.   Control system according to claim 9, characterized in that the control data are administered with the aid of a management information base (132).

11. Control system according to any of the preceding claims, characterized in that the operating information comprise input and/or output values for configuration an execution of print jobs, in particular for adjustment of parameters of the carrier material to be printed and for adjustment of the desired print quality, as well as for control of the operating states and for display of error states.

12. Control system according to any of the preceding claims, characterized in that the control data concern internal control variables, in particular measurement values, counter states and/or values contained in registers of the control unit (130, 140).

13. Control system according to any of the preceding claims, characterized in that the input and/or output of the operating information and/or of the control data occurs with the aid of a graphical user interface of the operating unit (156).

14. Method for input and/or output of operating information and control data of an electrophotographic printing or copying system with the aid of an operating unit,

in which operating information of the printing or copying system is input and/or output with the aid of at least one operating unit,

the electrophotographic printing or copying system is controlled via a first control unit (130) and at least one second control unit (140),

control data are transferred between the control units (130, 140) via a data line,

and in which at least one part of the transferred control data is input and/or output with the aid of the operating unit (156) of the printing or copying system.

5   15.   System for administration and transfer of control data of an electrophotographic printing or copying system,

in which information of control data are stored in a central database (132) of the printing or copying system,

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and in which a first control unit (130, 158, 196) of the printing or copying system has access to the control data with the aid of this information.

16.   System according to claim 15, characterized in that at least one part of the
15   control data is stored in a second control unit (140) of the printing or copying system.

17.   System according to claim 16, characterized in that the first control unit (130, 158, 156) reads out at least one part of the control data from the
20   second control unit (140) and/or transfers this to the second control unit (140).

18.   System according to any of the claims 15 through 17, characterized in that the first and/or second control unit is an operating unit (156) of the printing
25   or copying system.

19.   System according to any of the claims 16 through 18, characterized in that a distributed object model using a network protocol is provided for transfer of the control data and information between the control units (130, 140,
30   156, 158) and/or the database (132).

20. System according to claim 19, characterized in that the transfer occurs with the aid of a Remote Method Invocation communication using a Simple Network Management Protocol, whereby the database contains a management information base.

21. Method for administration and transfer of control data of an electrophotographic printing or copying system,

in which information of control data is stored in a central database (132) of the printing or copying system,

and in which a first control unit (130, 156, 158) of the printing or copying system accesses the control data with the aid of this information.

22. Electrophotographic printing or copying system with at least two printing units,

in which the first printing unit (90) comprises a first operating unit (94) and a first control unit (96),

the second printing unit (92) comprises a second operating unit (98) and a second control unit (100),

data that contain operating information and/or control data can be transferred between the first control unit (96) and the second control unit (160 [sic]),

and in which the first control unit (96) provides data for the first operating unit (94) and data for the second operating unit (98).

23. System according to claim 22, characterized in that the first control unit (96) is a master control unit and the second control unit (100) is a slave control unit.

5 24. System according to any of the claims 22 or 23, characterized in that the first control unit (96) provides the same data to the first operating unit (94) and to the second operating unit (98).

25. System according to any of the claims 22 through 25, characterized in that
10 both the data transferred between the control units (96, 100) and the data transferred from the first control unit (96) to the second operating unit (98) are transferred over a data line (124).

26. System according to any of the claims 22 through 25, characterized in that
15 the first printing unit is arranged in a first printer (90) or copier and the second printing unit is arranged in a second printer (92) or copier, whereby the first and the second printing unit respectively generate at least one print image on the same carrier material.

20 27. System according to claim 26, characterized in that the carrier material is a continuous carrier material.

28. Method for input and/or output of operating information in an electrophotographic printing or copying system with at least two printing
25 units,

in which the first printing unit (90) is operated with the aid of a first operating unit (94) and is controlled with the aid of a first control unit (96),

30 the second printing unit (92) is operated with the aid of a second operating unit (98) and is controlled with the aid of a second control unit (100),

data that contain operating information and/or control data that are input and/or output via the operating units (94, 98) are transferred between the first control unit (96) and the second control unit (160),

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and in which data that are generated by the first control unit (96) are provided for the first operating unit (94) and for the second operating unit (98).

10   29.   Electrophotographic printing or copying system with at least two printing units,

with an operating unit (94) for input and/or output of parameters of the printing or copying system,

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whereby, given an input of a value of a first parameter of the first printing unit (90), the value of the same parameter of the second printing unit (92) is automatically changed dependent on the value of the first parameter.

20   30.   Printing or copying system according to claim 29, characterized in that the input value of the first parameter is automatically assumed as a value for the second parameter.

      31.   Printing or copying system according to one of the claims 29 or 30,
25   characterized in that the automatic changing of the value of the same parameter can be activated and deactivated.

      32.   Method for control of an electrophotographic printing or copying system with at least two printing units,

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in which parameters of the printing or copying system can be input and/or output with the aid of an operating unit (94),

and in which, given an input of a value of a first parameter of a first printing unit (90), the value of the same parameter of a second printing unit (92) is automatically changed dependent on the value of the first parameter.